

**REMARKS**

Reconsideration and allowance of this application are respectfully requested. Claims 1-31 are pending in the application. The rejections are respectfully submitted to be obviated in view of the remarks presented herein.

**Rejection Under 35 U.S.C. § 102(a) - Nakano et al.**

Claims 1-3 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Nakano et al. (U.S. Patent Number 5,987,438; hereinafter “Nakano”). The rejection is respectfully traversed.

Regarding claim 1, Applicant’s claimed invention relates to a portable terminal storing and accessing secret data. A control section is connected to a signal transfer line set provided between a storage device and a system unit. The control section validates transfer of a control signal, transferred from the storage device to the system unit or from the system unit to the storage device on the signal transfer line set, to permit the transfer of the secret data.

Turning to the cited art, Nakano discloses an electronic wallet system which automatically locks/unlocks an IC card (2) when loaded into an IC card loader unit (110) of an IC card reader/writer (1) (see Figures 1-5). A control signal for unlocking the IC card (2) is generated by an IC card lock controller (17) of the IC card reader/writer (1) and supplied via a controller (11) and a data input/output unit (153) of interface unit (15) to the IC card (2) to **lock** the IC card (2) (column 10, lines 29-41, Figure 1). Alternatively, as shown in Figure 2, the

control signal is generated by an IC card unlock controller (114) for *unlocking* the IC card (2) (column 11, lines 9-36).

However, Nakano fails to teach or suggest “a control section which is connected to said signal transfer line set and validates transfer of said control signal from said storage device to said system unit or from said system unit to said storage device on said signal transfer line set to permit the transfer of said secret data,” as recited by claim 1. There is no control section in Nakano which is connected to the signal transfer line (line between the IC card (2) and the interface unit (15) of the IC card reader/writer (1)). Nakano fails to disclose or suggest any control section connected to the signal transfer line set between the IC card (2) and the IC card reader/writer (1).

Although the Examiner refers to column 11, lines 9-36 and column 13, line 55 to column 14, line 10 for the teaching of the claimed control section, Nakano’s disclosed verification unit (330) only compares, via the controller (11), an input user ID with a stored ID, and does not validate the transfer of a control signal from the IC card (2) to the IC card reader/writer (1) or from the IC card reader/writer (1) to the IC card (2) on the signal transfer line set to permit transfer of secret data. On the contrary, the verification unit (330) is used in the embodiment shown in Figure 10, whereby the IC card (2) is unlocked by the IC card lock controller (26) upon a determination that a verified result is obtained from the verification unit (330). This verification of IDs as performed in the embodiment shown in Nakano’s Figure 10 is independent from the embodiment of exemplary Figure 2, in which a control signal is generated by the IC

card unlock controller (114) to automatically unlock the IC card (2) upon loading of the IC card (2).

Nakano in fact discloses a plurality of independent embodiments for unlocking the IC card (2), but none of Nakano's disclosed embodiments teach or suggest a control section connected to the signal transfer line set and validates transfer of a control signal on the signal transfer line set to permit transfer of secret data. Instead, Nakano's unlocking of an IC card (2) occurs either automatically when the IC card (2) is loaded and a control signal for unlocking is sent from an IC card unlock controller (117) (as shown in the embodiment of Figure 2), or when a verification unit (330) verifies that IDs are correct and an IC card lock controller (26) unlocks the IC card (2) (as shown in the embodiment of Figure 10).

At least by virtue of the aforementioned differences, Applicant's claim 1 distinguishes over Nakano. Applicant's claims 2 and 3 are dependent claims including all of the elements of independent claim 1, which as established above, distinguishes over Nakano. Therefore, claims 2 and 3 are distinguished over Nakano for at least the aforementioned reasons as well as for their additionally recited features. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e) are respectfully requested.

**Rejection Under 35 U.S.C. § 103(a) - Nakano et al. in view of Nakamura et al.**

Claims 4, 5, 13 and 14 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Nakamura et al. (U.S. Patent Number 5,917,168, "Nakamura"). The rejection is respectfully traversed.

Regarding claims 4 and 5, which are dependent on independent claim 1, Nakano fails to teach or suggest, *inter alia*, a control section validating transfer of a control signal on the data bus to permit the transfer of the secret data, as discussed above. Nakamura does not remedy the deficiencies of Nakano. Nakamura teaches a terminal for carrying out a transaction altering a token value stored in an IC card via an on-line transaction session at a remote terminal. Transaction messages are passed through a data link between the IC card and the remote terminal, relying on the IC card and the remote terminal for message security (column 2, lines 23-35). Mutual authentication and initiation functions are also performed in Nakamura, however, there is no teaching of a control section connected to a signal transfer line set and validating transfer of a control signal transferred on the signal transfer line set, to permit the transfer of secret data, as Applicant claims. At least by virtue of the aforementioned differences, Applicant's claims 4 and 5 distinguish over Nakano in view of Nakamura.

Regarding claim 13, a control circuit of a portable terminal is connected to a signal transfer line set and validates a control signal on the signal transfer line set output by a system unit to a storage unit, to permit the transfer of secret data. As discussed above, neither Nakano nor Nakamura teach or suggest, *inter alia*, a control circuit validating a control signal on the signal transfer line set to permit the transfer of the secret data, as discussed above. At least by virtue of the aforementioned differences, Applicant's claim 13 distinguishes over Nakano in view of Nakamura. Applicant's claim 14 is a dependent claim including all of the elements of independent claim 13, which as established above, distinguishes over Nakano in view of Nakamura. Therefore, claim 14 is distinguished over Nakano in view of Nakamura for at least

the aforementioned reasons as well as for its additionally recited features. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

**Rejection Under 35 U.S.C. § 103(a) - Nakano et al. in view of Nakamura et al. and further in view of Tetro et al.**

Claims 6, 7, 15 and 16 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Nakamura and further in view of Tetro et al. (U.S. Patent Number 6,095,413, “Tetro”). The rejection is respectfully traversed.

Regarding claims 6 and 7, Nakano fails to teach or suggest a control section validating transfer of a control signal to permit the transfer of secret data, as recited by independent claim 1. Nakamura and Tetro do not remedy the deficiencies of Nakano. Nakamura discloses a terminal for carrying out a transaction altering a token value stored in an IC card via an on-line transaction session at a remote terminal, as described above. Tetro discloses the authorizing of electronic credit card transactions and measures for detecting fraudulent transactions. However, there is no mention in either Nakamura or Tetro of a control section validating transfer of a control signal to permit the transfer of secret data. At least by virtue of the aforementioned differences, Applicant’s claims 6 and 7 distinguish over Nakano in view of Nakamura and further in view of Tetro.

Regarding claims 15 and 16, Nakano in view of Nakamura fail to teach or suggest a control circuit validating a control signal on the signal transfer line set to permit the transfer of secret data, as recited by independent claim 13 as discussed above. Tetro does not remedy the deficiencies of Nakano and Nakamura. There is no mention in Tetro of a control circuit

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validating a control signal on the signal transfer line set to permit the transfer of secret data, as also discussed above. At least by virtue of the aforementioned differences, Applicant's claims 15 and 16 distinguish over Nakano in view of Nakamura and further in view of Tetro. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

**Rejection Under 35 U.S.C. § 103(a) - Nakano et al. in view of Sloan**

Claims 8-12, 20, 25, 26, 28, 29 and 31 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Sloan (U.S. Patent Number 6,179,205). The rejection is respectfully traversed.

Regarding claims 20, 25, 28 and 31, Nakano fails to teach or suggest, *inter alia*, a control section validating transfer of a control signal on the data bus to permit the transfer of the secret data, as discussed above. Sloan does not remedy the deficiencies of Nakano. Sloan teaches the locking and unlocking of an application in a smart card for security purposes. However, there is also no teaching in Sloan of a control section connected to a signal transfer line set and validating transfer of a control signal transferred on the signal transfer line set, to permit the transfer of secret data, as Applicant claims.

Furthermore, the Examiner admits in paragraph 16 on page 8 of the Office Action that Nakano is silent on a switch section which generates a valid signal in response to operation of the switch section by a user, and relies on Sloan for this teaching. However, Sloan does not remedy the deficiencies of Nakano because Sloan's pressing of a lock or unlock button merely locks/unlocks an application on a smart card to prevent access by an unauthorized user of data

stored on the smart card. Such a trigger of a lock/unlock function in Sloan does not teach or suggest the generation of a valid signal which the control circuit is responsive to for permitting transfer of the control signal. At least by virtue of the aforementioned differences, Applicant's claims 20, 25, 28 and 31 distinguish over Nakano in view of Sloan.

Regarding claims 8-12, 26 and 29, which are dependent on independent claim 1, Nakano fails to teach or suggest, *inter alia*, a control section validating transfer of a control signal on the data bus to permit the transfer of the secret data, as discussed above. Sloan does not remedy the deficiencies of Nakano. Sloan teaches the locking and unlocking of an application in a smart card for security purposes. However, as discussed above, there is also no teaching in Sloan of a control section connected to a signal transfer line set and validating transfer of a control signal transferred on the signal transfer line set, to permit the transfer of secret data, as Applicant claims.

Furthermore, as also discussed above, Sloan does not teach or suggest then generation of a valid signal in a switch section in which a control circuit operates to permit transfer of the control signal in response to the valid signal, as recited by claim 8. Sloan also does not teach or suggest a user validation of transfer of the control signal by operation a switch as recited by claim 26, or a generation of a signal which permits transfer of the control signal, as recited by claim 29. Sloan's lock and unlock buttons only lock/unlock applications to prevent unauthorized access, and do not relate to any permissions for transfer of a control signal. At least by virtue of the aforementioned differences, Applicant's claims 8-12, 26 and 29 distinguish over Nakano in

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view of Sloan. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

**Rejection Under 35 U.S.C. § 103(a) - Nakano et al. in view of Sloan and further in view of Nakamura et al.**

Claims 21 and 22 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Sloan and further in view of Nakamura. The rejection is respectfully traversed.

Claims 21 and 22 are dependent upon independent claim 20, and as discussed above, Nakano in view of Sloan fails to teach or suggest at least a control circuit operating to permit transfer of a control signal in response to a valid signal such that transfer of secret data is permitted, or of a switch section which generates the valid signal in response to operation of the switch section by a user, as discussed above. Nakamura does not remedy the deficiencies of Nakano in view of Sloan. There is also no teaching in Nakamura of a control circuit operating to permit transfer of a control signal from a system unit to a storage device in response to a valid signal, such that transfer of secret data from the storage device to the system unit is permitted, or of a switch section which generates a valid signal, as Applicant claims. At least by virtue of the aforementioned differences, Applicant's claims 21 and 22 distinguish over Nakano in view of Sloan and further in view of Nakamura. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.



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**Rejection Under 35 U.S.C. § 103(a) - Nakano et al. in view of Sloan and further in view of Tetro et al.**

Claims 23 and 24 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Sloan and further in view of Tetro. The rejection is respectfully traversed.

As discussed above, Nakano in view of Sloan fails to teach or suggest a control circuit operating to permit transfer of a control signal such that transfer of secret data from a storage device to a system unit is permitted, or of a switch section which generates the valid signal in response to operation of the switch section by a user, as recited by claim 20. Tetro does not remedy the deficiencies of Nakano and Sloan. Tetro discloses the authorizing of electronic credit card transactions and measures for detecting fraudulent transactions. However, there is no mention in Tetro of a control circuit validating transfer of a control signal to permit the transfer of secret data, or of a switch section generating a valid signal. At least by virtue of the aforementioned differences, Applicant's claims 23 and 24 distinguish over Nakano in view of Nakamura and further in view of Tetro. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

**Rejection Under 35 U.S.C. § 103(a) - Nakano et al. in view of Nakamura et al. and further in view of Sloan**

Claims 17-19, 27 and 30 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Nakamura and further in view of Sloan. The rejection is respectfully traversed.

Regarding claim 13, a control circuit of a portable terminal is connected to a signal transfer line set and validates a control signal on the signal transfer line set output by a system unit to a storage unit, to permit the transfer of secret data. As discussed above, Nakano in view of Nakamura fails to teach or suggest, *inter alia*, a control circuit which is connected to a signal transfer line set and validates a control signal on the signal transfer line set to permit the transfer of the secret data. As also discussed above, Sloan teaches the locking and unlocking of an application in a smart card for security purposes, however, there is no teaching in Sloan of a control section connected to a signal transfer line set and validation of a control signal transferred on the signal transfer line set, to permit the transfer of secret data, as Applicant claims. At least by virtue of the aforementioned differences, Applicant's claim 13 distinguishes over Nakano in view of Nakamura and further in view of Sloan. Applicant's claims 17-19, 27 and 30 are dependent claims including all of the elements of independent claim 13, which as established above, distinguishes over Nakano in view of Nakamura and further in view of Sloan. Therefore, claims 17-19, 27 and 30 are distinguished over Nakano in view of Nakamura and further in view of Sloan for at least the aforementioned reasons as well as for their additionally recited features. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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CUSTOMER NUMBER

  
Lenny R. Jiang  
Registration No. 52,432

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